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AMENDMENT TO THE SPECIFICATION

Please Amend Paragraph 29 to state,

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[00029] The method can further include the step of using dot product mathematics to perform the compilation. The dot product mathematics is a summation at each geographic location G of the product of corresponding elements of the horizon vector file and the attribute vector file at each geographic location G. The method of horizon binning can be determined by US Patent Number 6,865,521 "Method for Horizon Binning for an Area of Interest".

Please Amend Paragraph 35, to state,

[00035] FIG 1 is an overall schematic of the method for deriving a seismic attribute file. After the initial step of inputting horizon file data, (Step 110), the gradient of the horizon file data is obtained thereby producing a horizon vector file (Step 140). The other initial step of inputting attribute file data (Step 120) is followed by indexing from the attribute file data at corresponding geographic locations of the horizon file (Step 130). (Step 121) identifies portions of the attribute file that correspond to a set of geographic coordinates in the horizon file data. The product of this step—Step 121 is an attribute file at locations that correspond to similar locations in the horizon file data. The gradient of the attribute file data is then obtained producing an attribute vector file (Step 150). A compilation of the horizon vector file and the attribute vector file is performed (Step 160). Finally, from the compilation, it can be ascertained if measurable changes are in a direction towards a surface datum for a specific time and depth (Step 170). The specific time and depth can then be detected and measured. (Step 161) is dot product mathematics only at geographic locations where all components of both the horizon vector file and the attribute file exists and are finite real numbers. (Step 163) refers to an optional step of performing horizon binning usable with this method. Additionally, Patent No. 6865521 also issued to the same inventor, Michael Padgett on horizon binning is hereby incorporated by reference.

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AMENDMENT TO FIGURES

The Office Action objected to the drawings under 37 CFR § 1.83(a).

To obviate this rejection Applicant submits an amended Figure 1 to show every feature of the invention specified in the claims. Applicant does not believe that any new matter has been added. Reconsideration of the amended figure is respectfully requested.

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